

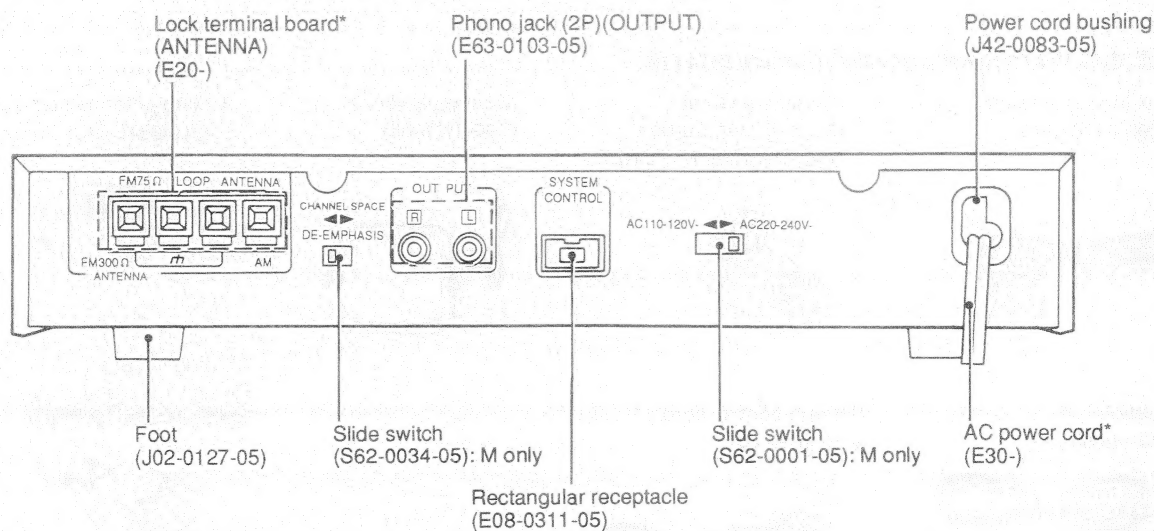
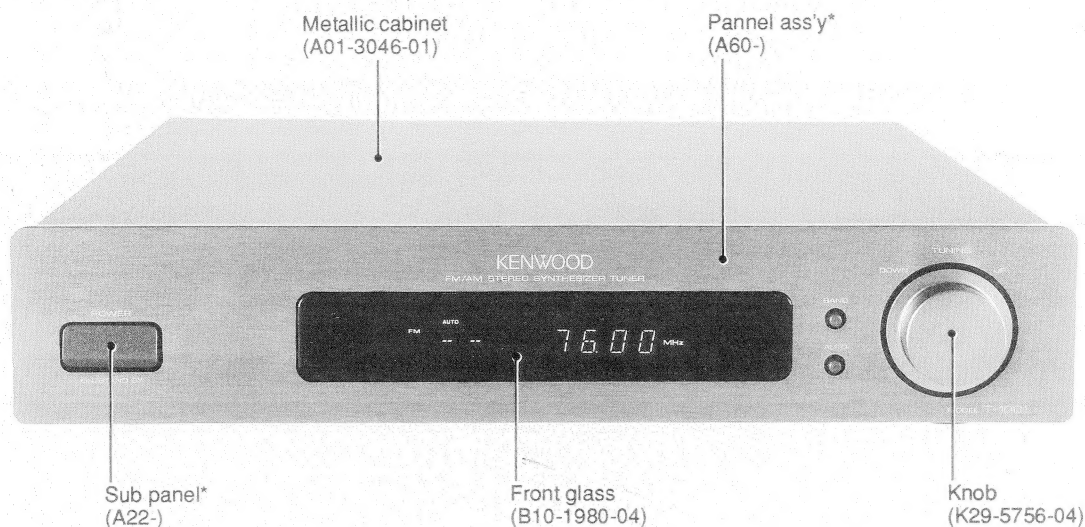
FM/AM STEREO SYNTHESIZER TUNER

# T-1001/L

## SERVICE MANUAL

# KENWOOD

© 1993-7 PRINTED IN JAPAN  
B51-4759-00 (S) 2335



\* Refer to parts list on page 28.

# T-1001/L

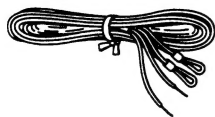
## CONTENTS/ACCESSORIES

BLOCK DIAGRAM .....	3	PC BOARD .....	17
CIRCUIT DESCRIPTION .....	5	SCHEMATIC DIAGRAM .....	19
ADJUSTMENT .....	12	EXPLODED VIEW .....	27
REGLAGE .....	14	PARTS LIST .....	28
ABGLEICH .....	15	SPECIFICATIONS .....	BACK COVER
WIRING DIAGRAM .....	16		

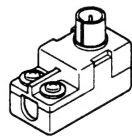
### Accessories

**Check that the following accessories are present.**

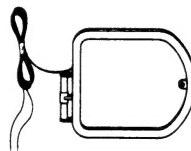
FM indoor antenna ..... 1  
(T90-0176-05)



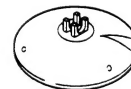
Antenna adaptor ..... 1  
(For U.K. and Europe)  
(T90-0185-05): E, T ONLY



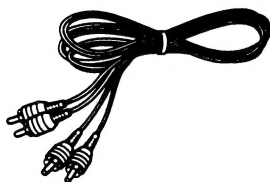
AM loop antenna ..... 1  
(T90-0173-05)



Loop antenna stand ..... 1  
(J19-2815-04)



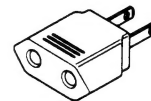
Audio cord ..... 1  
(E30-2600-05)



System control cord ..... 1  
(E30-2628-05)



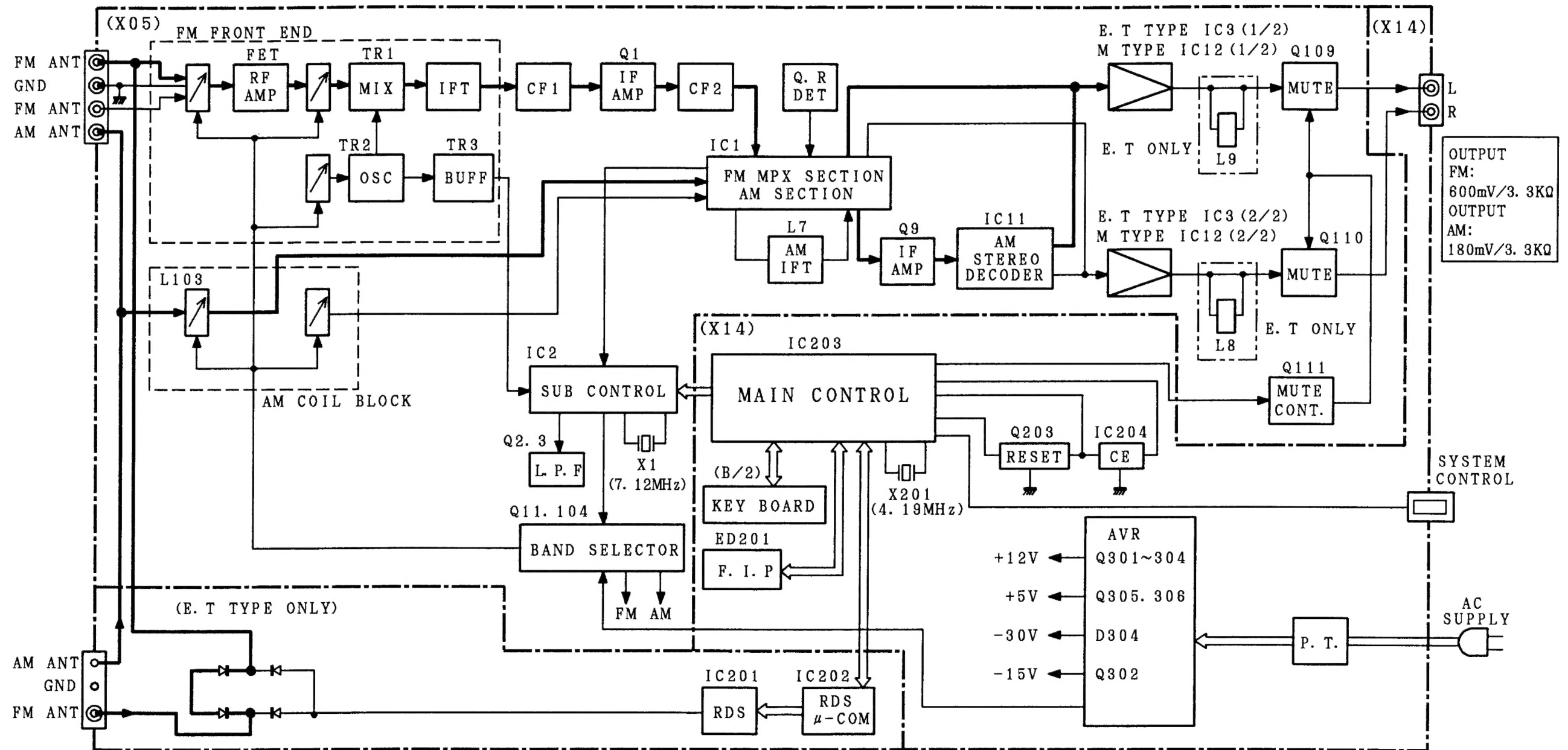
AC plug adaptor ..... 1  
(Except for some areas)  
(E03-0115-05): M ONLY



For the unit with a European AC  
plug in areas other than Europe

# T-1001/L T-1001/L

## BLOCK LEVEL DIAGRAM



# T-1001/L

## CIRCUIT DESCRIPTION

**TUNER  $\mu$ -Com:  $\mu$ PD78043GF-039 (X14: IC203)**

### 1. Function Description

- 20 ch random preset.
- Synchronization control with IF COUNT.
- RDS function (E,T TYPE only).
- AM STEREO compatible.

### 2. Controlled Units

- (1) PLL IC  
LC7218
- (2) RDS synchronizing microcomputer (E TYPE only).  
LC6543H-4600
- (3) Fluorescent display tube (9 grid/16 segment)  
→ Dynamic drive via microcomputer.  
CM1224C

### 3. Destination

Destination	Diode SW					Band	Receive frequency range	Inter channel space	IF	RF
	4	3	2	1	0					
J	*	*	*	*	0	FM	76.0 MHz - 90.0 MHz	100 kHz	-10.7 MHz	25 kHz
						AM	531 kHz - 1602 kHz	9 kHz	+450 kHz	9 kHz
K1	*	*	1	0	1	FM	87.5 MHz - 108.0 MHz	100 kHz	+10.7 MHz	25 kHz
						AM	530 kHz - 1610 kHz	10 kHz	+450 kHz	10 kHz
K2	*	*	0	0	1	FM	87.5 MHz - 108.0 MHz	100 kHz	+10.7 MHz	25 kHz
						AM	530 kHz - 1700 kHz	10 kHz	+450 kHz	10 kHz
E1	0	0	*	1	1	FM	87.5 MHz - 108.0 MHz	50 kHz	+10.7 MHz	25 kHz
						AM	531 kHz - 1602 kHz	9 kHz	+450 kHz	9 kHz
E1'	1	0	*	1	1	FM RDS	87.5 MHz - 108.0 MHz	50 kHz	+10.7 MHz	25 kHz
						AM	531 kHz - 1602 kHz	9 kHz	+450 kHz	9 kHz
E2	0	1	*	1	1	FM	87.5 MHz - 108.0 MHz	50 kHz	+10.7 MHz	25 kHz
						AM	531 kHz - 1602 kHz	9 kHz	+450 kHz	9 kHz
						LW	153 kHz - 279 kHz	9 kHz	+450 kHz	9 kHz
E2'	1	1	*	1	1	FM RDS	87.5 MHz - 108.0 MHz	50 kHz	+10.7 MHz	25 kHz
						AM	531 kHz - 1602 kHz	9 kHz	+450 kHz	9 kHz
						LW	153 kHz - 279 kHz	9 kHz	+450 kHz	9 kHz

Diode SW 0 → 0: J TYPE  
1: K, E TYPE

Diode SW 1 → Inter channel space  
0: FM 100 kHz/step, AM 10 kHz/step  
1: FM 50 kHz/step, AM 9 kHz/step

Diode SW 2 → AM band range (K type only)  
0: AM WIDE  
1: AM NARROW

Diode SW 3 → Select LW model or not.(E type only)  
0: Without LW  
1: With LW

Diode SW 4 → Select RDS model or not.(E type only)  
0: Without RDS  
1: With RDS

# T-1001/L

## CIRCUIT DESCRIPTION

### 1. Test Mode

#### 1.1 Test Mode with the Main Unit Keys

##### (1) Setting Procedure

- While pressing the DOWN key, connect the AC outlet.

##### (2) Cancellation

- When the AC outlet is disconnected, the initial setting will take effect and the test mode will be concealed.

##### (3) Description

##### 3-1 Auto POWER ON

- When the AC outlet is connected while the DOWN key is pressed, the POWER will turn ON and all functions will be at the initial setting.

##### 3-2 ALL LED ON Mode

- When the AC outlet is connected while the DOWN key is pressed, all LEDs will light. Any key operation on the main unit thereafter will return the LEDs to normal.

##### 3-3 Main Unit Key Validity Check

- Whether the main unit's keys are operable (valid) can be checked. Regarding the keys whose display does not change when they are used, their display will be made to change.

##### 3-4 Remote controller operation check with the main unit

- Use the SHUTTLE KEY UP/DOWN to adjust P.ch UP/DOWN.

##### 3-5 MUTE signal output

- The MUTE signal is not output.

#### 1.2 Test Mode With Serial Communications

##### (1) Setting Procedure

- For 16-bit serial communications, connect the AC outlet and enter the TEST ON code (0C2FFH).
- The serial test code can be received even within 1 second of POWER ON/OFF.

##### (2) Cancellation

- For 16-bit serial communications, enter the TEST OFF code (0C2FEH) or disconnect the AC outlet.

##### (3) Description

##### 1. Other operations during the test mode (serial communications)

- During the test mode (serial communications), the main unit's keys, remote controller keys, and normal serial code will be ineffective.

##### 2. Required operations for the test mode (serial communications).

- The serial code for the test mode (serial communications) can be used to check the operation of all circuits. Refer to the test mode serial code table.

- The code entered during the test mode (serial communications) will be effective regardless of the display mode.

- The following functions are available in the test mode (serial communications):

0 to 9, +10  
AUTO (AUTO ST./MONO)  
MEMORY (ENTER)  
UP/DOWN (MANUAL SCAN unnecessary)

- When a PRESET CH is called up and the SD detection prevention timer ends, a specific serial code will be output. The code will be output when the IF COUNT is executed and the IF COUNT is OK.

- During the test mode (serial communications), the MUTE signal is not output. This is for reducing the input-output switching time during the measurement.

- When a valid serial code for the test mode is received, the code identical to the code entered will be output.

- For checking the MUTE operation, MUTE has a special code.

##### TUNER MUTE

- To switch cyclically, enter the individual serial code. For example for AUTO STEREO/MONO, enter the two codes for AUTO STEREO and MONO.

- All the FL and LEDs will light. To cancel, enter the cancellation code. The LEDs will then return to normal.

- All functions (including test mode) will be initialized.



## CIRCUIT DESCRIPTION

### 1.3 Initial Settings

#### (1) Setting Procedure

- If the unit has a backup function, hold down the BAND KEY and connect the AC outlet. This will obtain the initial settings.
- During the test mode set with main unit's keys and the test mode with serial communications, the initial settings can be obtained by disconnecting and reconnecting the AC outlet.

#### (2) Description

- All function (including test mode) will be initialized.
- The manufacturer's memory is always set in the preset CH and area.

### 1.4 POWER ON Startup

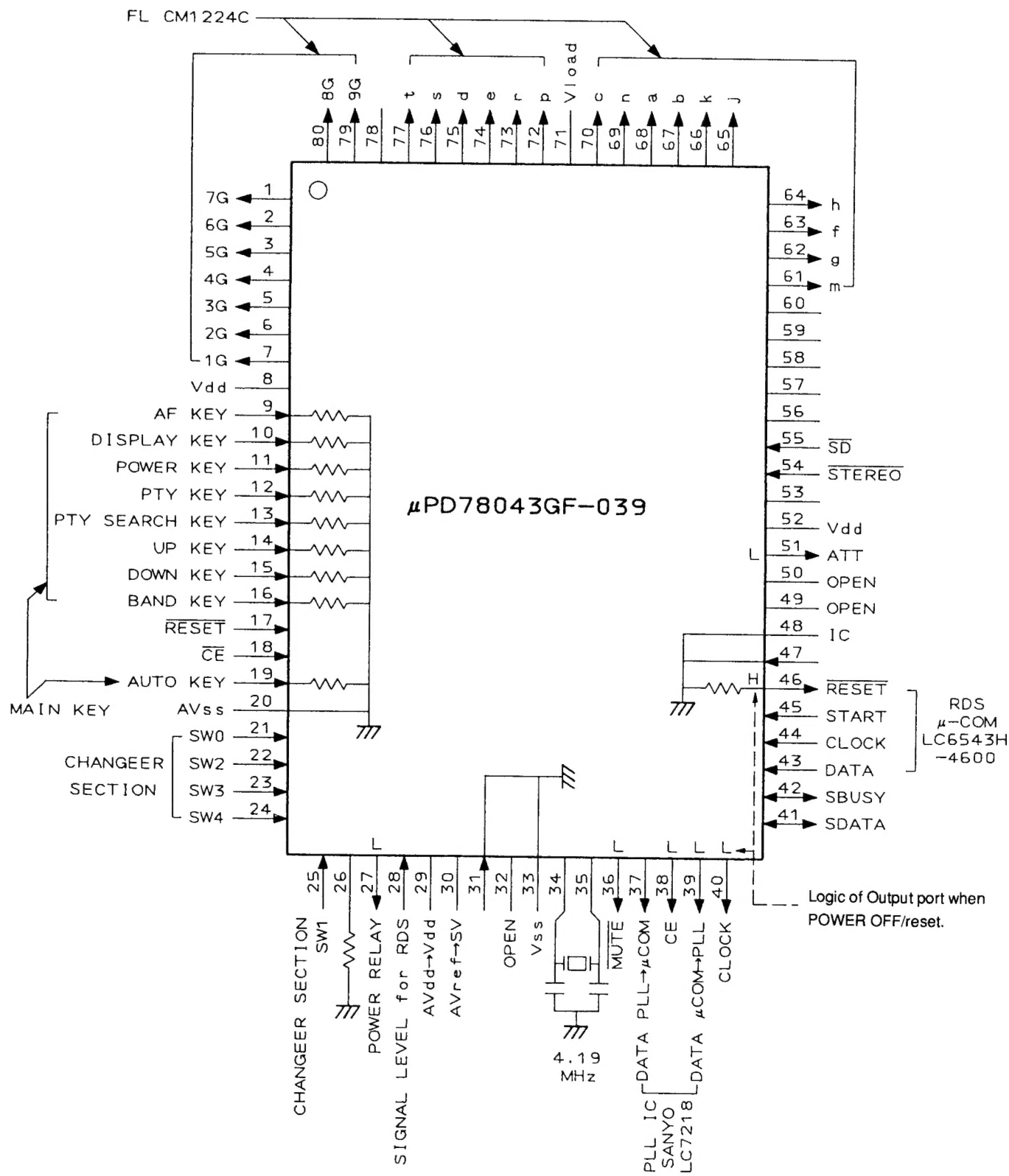
- Since the unit has a POWER key, no setting is required.

#### Test Frequency

CH \ Type	J Type	K Type		E Type	
	Without TV	Narrow	Wide	With LW	Without LW
1	FM 76.0 MHz	FM 98.0 MHz	FM 98.0 MHz	FM 98.0 MHz	FM 98.0 MHz
2	FM 78.0 MHz	FM 108.0 MHz	FM 108.0 MHz	FM 108.0 MHz	FM 108.0 MHz
3	FM 83.5 MHz	AM 630 kHz	AM 630 kHz	AM 630 kHz	AM 630 kHz
4	FM 88.0 MHz	AM 990 kHz	AM 990 kHz	AM 990 kHz	AM 990 kHz
5	FM 90.0 MHz	AM 1440 kHz	AM 1440 kHz	AM 1440 kHz	AM 1440 kHz
6	AM 531 kHz	AM 1610 kHz	AM 1610 kHz	AM 1602 kHz	AM 1602 kHz
7	AM 630 kHz	FM 87.5 MHz	AM 1700 kHz	LW 162 kHz	FM 87.5 MHz
8	AM 990 kHz	FM 87.5 MHz	FM 87.5 MHz	LW 216 kHz	FM 87.5 MHz
9	AM 1440 kHz	FM 87.5 MHz	FM 87.5 MHz	LW 270 kHz	FM 87.5 MHz
10	AM 1602 kHz	FM 89.1 MHz	FM 89.1 MHz	FM 89.1 MHz	FM 89.1 MHz
11	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz	LW 279 kHz	FM 87.5 MHz
12	FM 76.0 MHz	FM 90.0 MHz	FM 90.0 MHz	FM 90.0 MHz	FM 90.0 MHz
13	FM 76.0 MHz	FM 106.0 MHz	FM 106.0 MHz	FM 106.0 MHz	FM 106.0 MHz
14	FM 76.0 MHz	AM 530 kHz	AM 530 kHz	AM 531 kHz	AM 531 kHz
15	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz	LW 153 kHz	FM 87.5 MHz
16	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz
17	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz
18	FM 76.0 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz
19	AM 990 kHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz
20	FM 89.1 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz	FM 87.5 MHz

CIRCUIT DESCRIPTION

Pin Connection



## CIRCUIT DESCRIPTION

## Pin Description

No.	Pin Name	Name	I/O	Description
1	FIP6	7G	O	FL grid 7
2	FIP5	6G	O	FL grid 6
3	FIP4	5G	O	FL grid 5
4	FIP3	4G	O	FL grid 4
5	FIP2	3G	O	FL grid 3
6	FIP1	2G	O	FL grid 2
7	FIP0	1G	O	FL grid 1
8	VDD			Power supply terminal for microcomputer
9	P27	AF key	I	AF key input port
10	P26	DISPLAY key	I	Display key input port
11	P25	POWER key	I	Power keyb input port
12	P24	PTY key	I	PTY key input port
13	P23	PTY search key	I	PTY search key input port
14	P22	UP key	I	Up key input port
15	P21	DOWN key	I	Down key input port
16	P20	BAND key	I	Band key input port
17	RESET	RESET		Microcomputer reset terminal
18	P74	CE	I	Chip enable detection terminal
19	P73	AUTO key	I	Auto key input port
20	AVss			GND terminal for A/D converter
21	P17	INISW7	I	Destination switch 0 input port L: Japan, H: Other
22	P16	INISW6	I	Destination switch 2 input port L: AM WIDE, H: AM NARROW
23	P15	INISW5	I	Destination switch 3 input port L: Without LW, H: With LW
24	P14	INISW4	I	Destination switch 4 input port L: Without RDS, H: With RDS
25	P13	INISW3	I	Destination switch 1 input port (Channel space) L: FM 100kHz, AM 10kHz, H: FM 50 kHz, AM 9 kHz
26	P12			Not used.
27	P11	POWER	O	Power supply port for peripheral circuit
28	ANI0	SGLEVL	I	Signal level A/D input port for RDS
29	AVDD			Power supply terminal for A/D converter
30	AVREF			Reference voltage input terminal for A/D converter
31	P04			Not used. (GND)
32	XT2			Not used. (Open)
33	Vss			GND terminal for microcomputer
34	X1			Oscillator connection terminal for system clock
35	X2			Oscillator connection terminal for system clock
36	P37	MUTE	O	Mute signal output terminal
37	P36	PIFCNT	O	PLL IF count data input terminal
38	P35	PLLCE	O	PLL CE output terminal
39	P34	PLLDAT	O	PLL data output terminal

## CIRCUIT DESCRIPTION

No.	Pin Name	Name	I/O	Description
40	P33	PLLCLK	O	PLL clock output terminal
41	P32	SDATA	I/O	Serial communication data signal input/output terminal
42	P31	SBUSY	I/O	Serial communication busy signal input/output terminal
43	P30	DDATA	I	Data input terminal for RDS synchronization microcomputer
44	P03	DCLOCK	I	Clock input terminal for RDS synchronization microcomputer
45	P02	DSTART	I	Start input terminal for RDS synchronization microcomputer
46	P01	RDSRESET	O	Reset output terminal for RDS synchronization microcomputer
47	P00			Not used
48	IC			Connected to Vss
49	P72			Not used
50	P71			Not used
51	P70	ATT	O	Attenuator control port H: ATT ON (RF DISTANCE) L: ATT OFF (RF DIRECT)
52	VDD			Power supply terminal for microcomputer
53				Not used
54	P126	STEREO	I	Stereo signal input terminal L: STEREO
55	P125	SD	I	SD signal input terminal L: TUNED ON
56	P124			Not used
57	P123			Not used
58	P122			Not used
59	P121			Not used
60	P120			Not used
61	FIP25	m	O	FL segment m
62	FIP24	g	O	FL segment g
63	FIP23	f	O	FL segment f
64	FIP22	h	O	FL segment f
65	FIP21	j	O	FL segment j
66	FIP20	k	O	FL segment k
67	FIP19	b	O	FL segment b
68	FIP18	a	O	FL segment a
69	FIP17	n	O	FL segment n
70	FIP16	c	O	FL segment c
71	VLOAD			- 30V terminal for FL
72	FIP15	p	O	FL segment p
73	FIP14	r	O	FL segment r
74	FIP13	e	O	FL segment e
75	FIP12	d	O	FL segment d
76	FIP11	s	O	FL segment s
77	FIP10	t	O	FL segment t
78	FIP9			Not used
79	FIP8	9G	O	FL grid 9
80	FIP7	8G	O	FL grid 8

## CIRCUIT DESCRIPTION

16 bit Serial test code (C 2 XXH) ~XG-NEW AMP (SAA 403)~

TYPE FUNC	AMP										TUNER					
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0	POWER OFF	CD DIRECT OFF	SP B OFF	DUAL SOUND LEVEL 1	NB OFF				POWER OFF	0	MEMORY (ENTER)					
1	POWER ON	CD DIRECT ON	SP B ON	DUAL SOUND LEVEL 2	OMNI SP ON				POWER ON	1	MAIN					
2	PHONO	CD REC OFF	HIT MASTER OFF	DUAL SOUND LEVEL 3					MUTE OFF	2	SUB					
3	CD	CD REC ON	HIT MASTER ON	DUAL SOUND INPUT CD					MUTE ON	3	BOTH					
4	TUNER	SOURCE DIRECT OFF	MOTOR VOL UP	DUAL SOUND INPUT TUNER					AUTO STEREO	4						
5	TAPE 1 (TAPE A)	SOURCE DIRECT ON	MOTOR VOL DOWN	DUAL SOUND INPUT TAPE					MONO	5						
6	TAPE 2 (TAPE B)	LINE STRAIGHT OFF	MOTOR VOL STOP	DUAL SOUND INPUT MD/DAT					TUNED OFF	6						
7	AUX	LINE STRAIGHT ON	DBS/TV	DUAL SOUND INPUT VIDEO					TUNED ON	7						
8	DAT	LOUDNESS OFF	TAPE 2 MONITOR OFF	DUAL SOUND INPUT AV/AUX					ACTIVE RECEPTION OFF	8						
9	VIDEO 1 (VIDEO)	LOUDNESS ON	TAPE 2 MONITOR ON	BGM OFF					ACTIVE RECEPTION ON	9						
A	VIDEO 2	SUB SONIC OFF	VIDEO MUTE ON	BGM ON					RF DIRECT	+10						
B	VIDEO 3	SUB SONIC ON	LAC VOL UP	FAN OFF				ALL LIGHT OFF	RF DISTANCE	BAND FM						ALL LIGHT OFF
C	VDP	SUPER WOOFER OFF	LAC VOL DOWN	FAN ON				ALL LIGHT ON	IF WIDE	BAND AM/MW						ALL LIGHT ON
D	MUTE ON	SUPER WOOFER ON	LAC VOL STOP	FAN SPEED LOW				AMP INITIAL	IF NORMAL	BAND TV/LW						TUNER INITIAL
E	SEL MUTE ON	SPEAKER OFF (SP A OFF)	DUAL SOUND OFF	FAN SPEED HIGH				AMP SERIAL TEST OFF	IF NARROW	DOWN						TUNER SERIAL TEST OFF
F	MUTE ALL OFF	SPEAKER ON (SP A ON)	DUAL SOUND ON	NB ON				AMP SERIAL TEST ON	DIRECT	UP						TUNER SERIAL TEST ON

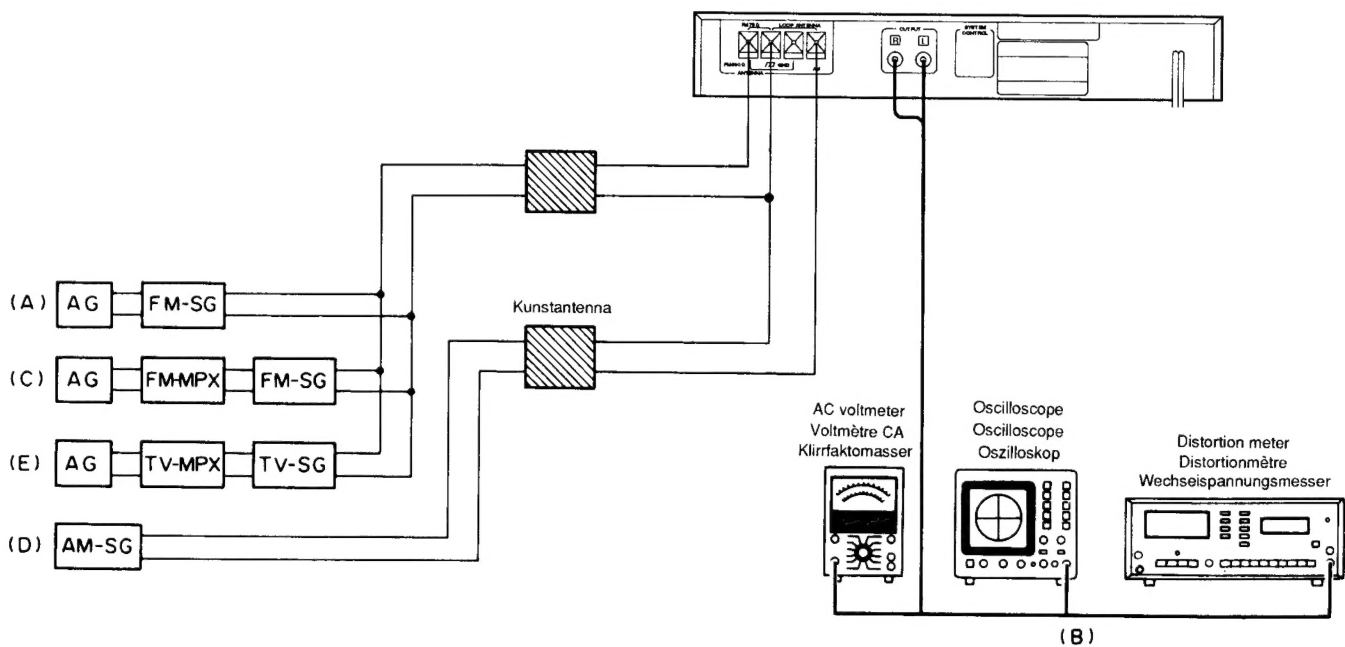
 : Transmission code     : Reception code

# T-1001/L

## ADJUSTMENT

### T-1001

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
<b>FM SECTION</b> Unless otherwise specified, the individual switches should be set as following: <b>BAND: FM</b>							
1	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, $\pm 68.25\text{kHz}$ dev Selector: L or R 60dB $\mu$ (ANT input)	(B)	AUTO 98.0MHz	IFT (W02-)	Minimum distortion.	





## ADJUSTMENT

## T-1001L

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
<b>FM SECTION</b>		<b>BAND: FM</b>					
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, $\pm 75$ kHz dev 60dB $\mu$ (ANT input)	Connect a DC voltmeter between TP3 and TP4. (X05-)	AUTO or MONO 98.0MHz	L3 (X05-)	0V	(a)
					L4 (X05-)	Minimum distortion.	
2	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, $\pm 68.25$ kHz dev Pilot: $\pm 7.5$ kHz dev 60dB $\mu$ (ANT input)	(B)	AUTO 98.0MHz	IFT (W02-)	Minimum distortion.	
3	SEPARATION	(C) 98.0MHz 1kHz, $\pm 40$ kHz dev Pilot: $\pm 6$ kHz dev Selector: L or R 60dB $\mu$ (ANT input)	(B)	AUTO 98.0MHz	VR3 (X05-)	Minimum crosstalk.	
4	TUNING LEVEL	(A) 98.0MHz 1kHz, $\pm 75$ kHz dev 14dB $\mu$ (ANT input) 75 $\Omega$ 18dB $\mu$ (ANT input) 300 $\Omega$	(B)	AUTO or MONO 98.0MHz	VR1 (X05-)	Adjust VR1 and stop at the point where FL201 (TUNED) goes ON.	
<b>AM SECTION</b>		<b>BAND: AM(MW)</b>					
(1)	TUNING LEVEL	(D) 1008 kHz 400Hz, 30% mod 26 dB $\mu$ (ANT input)	(B)	1008 kHz	VR2 (X05-)	Adjust VR2 and stop at the point where FL201 (TUNED) goes ON.	

When TUNER PCB (X05-) is disconnected from main unit, connect PCB's GND (ANT shield plate) and main unit chassis using alligator clip. Then, check TUNER PCB.

REGLAGE

T-1001

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
SECTION MF A moins, de spécification contraire, régler les commutateurs respectifs comme suit: BANDE: FM							
1	DISTORSION (STEREO)	(C) 98,0MHz 1kHz, ±68,25kHz dév Selecteur: L ou R 60dBμ(Entrée ANT)	(B)	AUTO 98,0MHz	IFT (W02-)	Distorsion minimale.	

T-1001L

N°	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
SECTION MF BANDE: FM							
1	DETECTEUR	(A) 98,0MHz 1kHz, ±75kHz dév 60dBμ(Entrée ANT)	Relier un voltmètre CC entre les TP3 et TP4. (X05-)	AUTO ou MONO 98,0MHz	L3 (X05-) L4 (X05-)	0V Distorsion minimale.	(a)
2	DISTORSION (STEREO)	(C) 98,0MHz 1kHz, ±68,25kHz dév Signal pilote: ±7,5 kHz dév 60dBμ(Entrée ANT)	(B)	AUTO 98,0MHz	IFT (W02-)	Distorsion minimale.	
3	SEPARATION	(C) 98,0MHz 1kHz, ±40kHz dév Signal pilote: ±6 kHz dév Selecteur: L ou R 60dBμ(Entrée ANT)	(B)	AUTO 98,0MHz	VR3 (X05-)	Diaphonie minimale.	
4	NIVEAU D'ACCORDER	(A) 98,0MHz 1 kHz, ±75 kHz dév 14dBμ(Entrée ANT) 75Ω 18dBμ(Entrée ANT) 300Ω	(B)	AUTO ou MONO 98,0MHz	VR1 (X05-)	Ajuster VR1 arrêter le mouvement de VR1 au moment où le FL201 (TUNED) s'allume.	
SECTION MA BANDE: AM(MW)							
(1)	NIVEAU D'ACCORDER	(D) 1008 kHz 400 Hz, 30% mod 26dBμ(Entrée ANT)	(B)	1008 kHz	VR2 (X05-)	Ajuster VR2 arrêter le mouvement de VR1 au moment où le FL201 (TUNED) s'allume.	

ABGLEICH

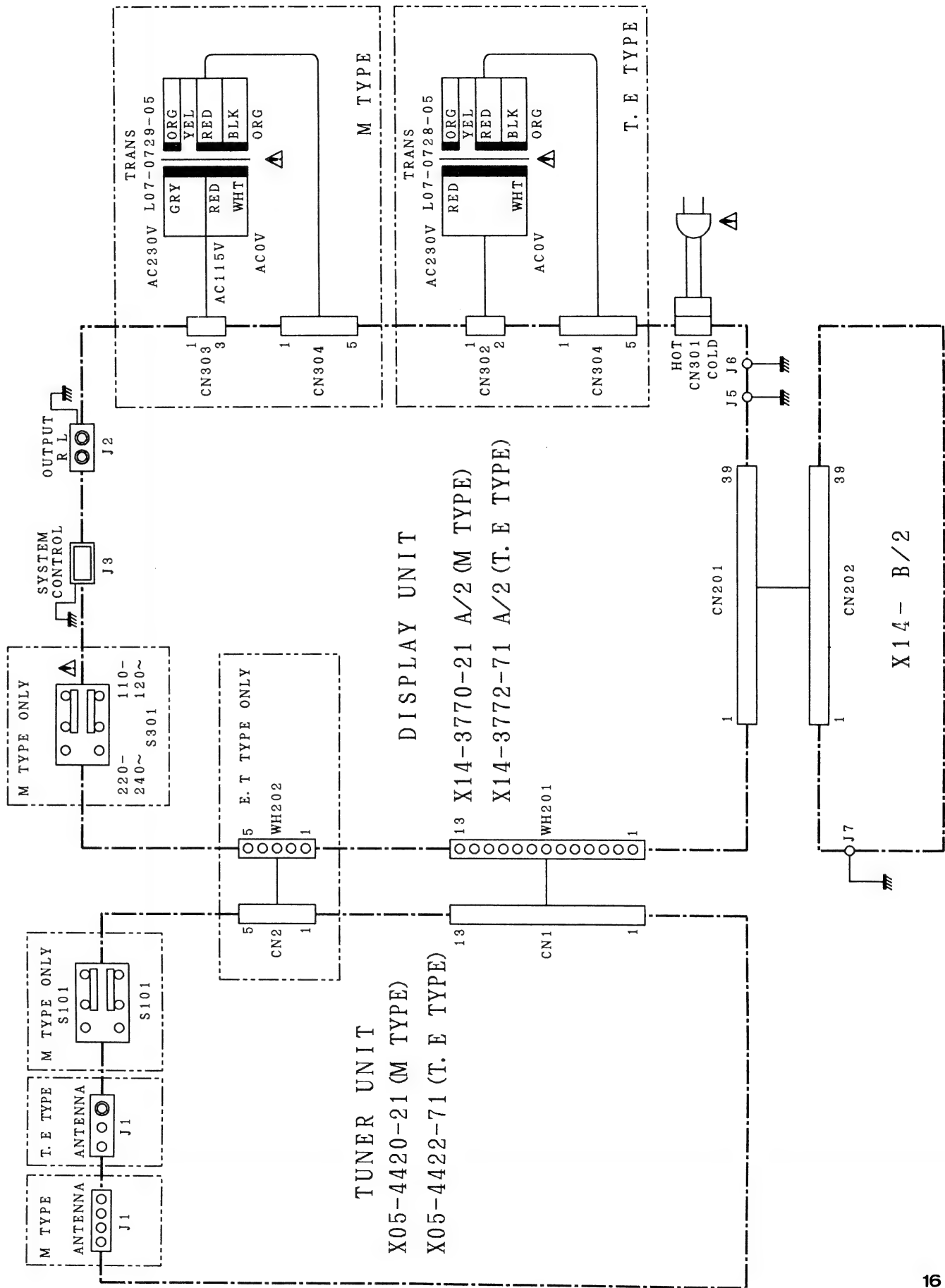
WHEN REPAIRING

T-1001

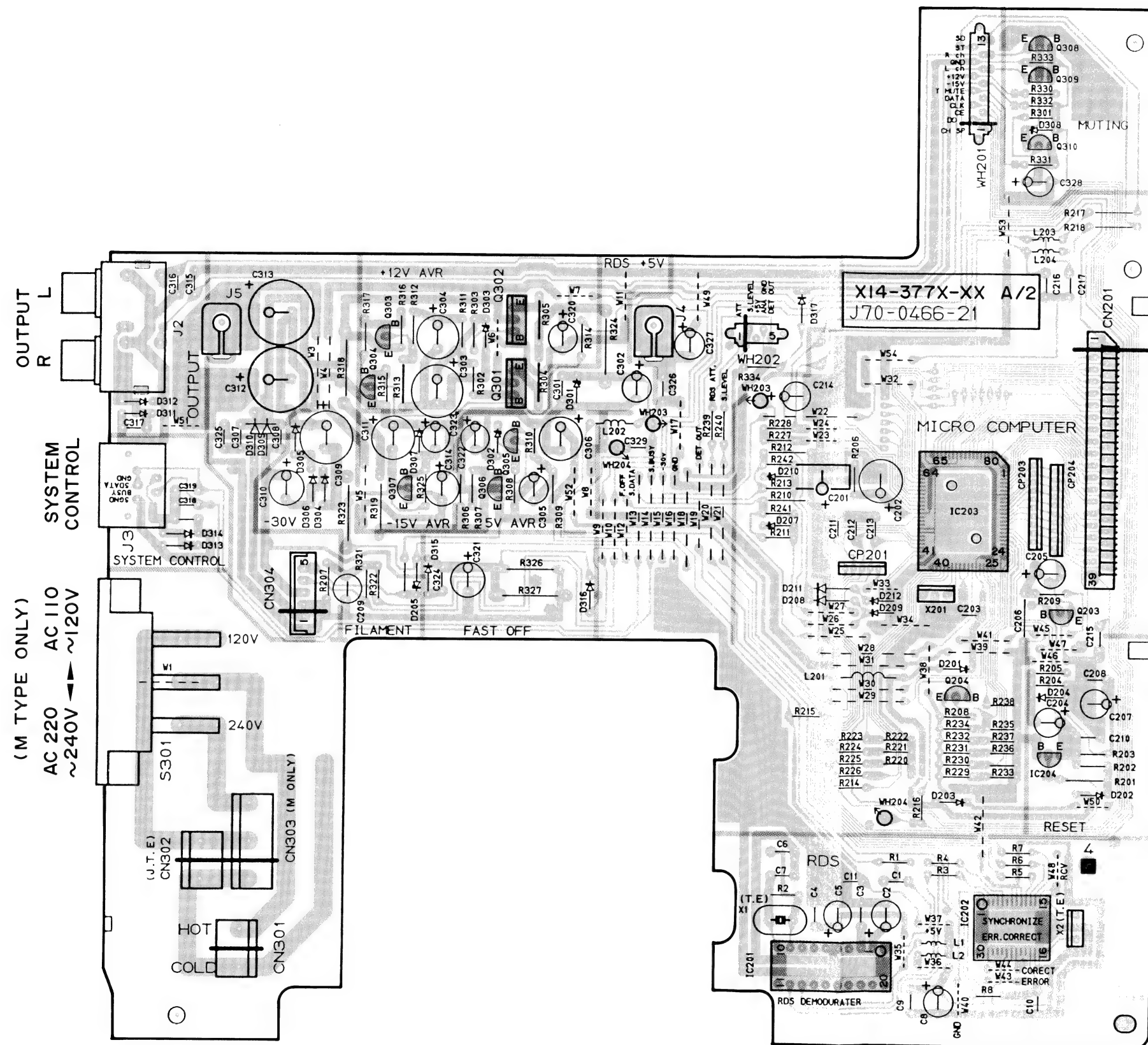
NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	TUNER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
UKW-EMPfangSABTEILUNG Wenn nicht anders angegeben, die einzelnen Schalter wie folgt einstellen: BAND: FM							
1	KLIRRFaktor (STEREO)	(C) 98,0MHz 1kHz, ±68,25kHz Hub Wähler: L oder R 60dBμ(ANT-Eingang)	(B)	AUTO 98,0MHz	IFT (W02-)	Minimal Klirrfaktor.	

T-1001L

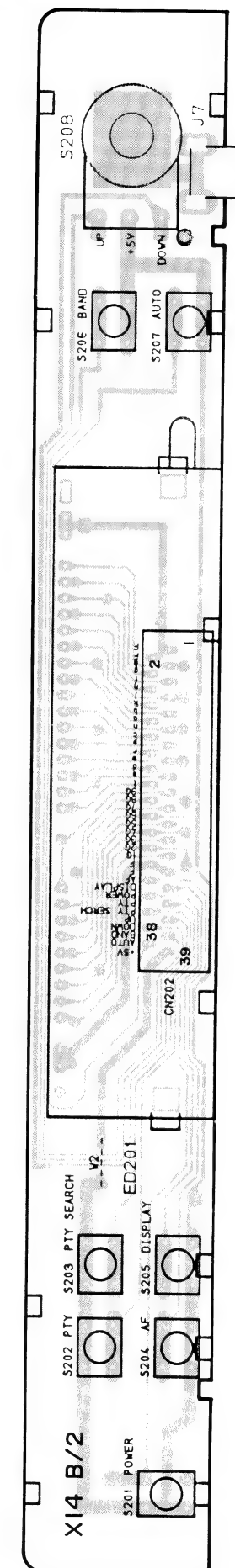
NR.	GEGENSTAND	EINGANGS-EINSTELLUNG	AUSGANGS-EINSTELLUNG	TUNER-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
UKW-EMPfangSABTEILUNG BAND: FM							
1	DETEKTOR	(A) 98,0MHz 1kHz, ±75kHz Hub 60dBμ(ANT-Eingang)	Einen Gleichspannungsmesser zwischen TP3 und TP4 anschließen. (X05-)	AUTO oder MONO 98,0MHz	L3 (X05-) L4 (X05-)	0V Minimal Klirrfaktor.	(a)
2	KLIRRFaktor (STEREO)	(C) 98,0MHz 1kHz, ±68,25kHz Hub Pilotten: ±7,5 kHz Hub 60dBμ(ANT-Eingang)	(B)	AUTO 98,0MHz	IFT (W02-)	Minimal Klirrfaktor.	
3	TRENNUNG	(C) 98,0MHz 1kHz, ±40 kHz Hub Pilotten: ±6 kHz Hub Wähler: L oder R 60dBμ(ANT-Eingang)	(B)	AUTO 98,0MHz	VR3 (X05-)	Optimale Trennung.	
4	ABSTIMM PEGEL	(A) 98,0MHz 1 kHz, ±75 kHz Hub 14dBμ(ANT-Eingang) 75Ω 18 dBμ(ANT-Eingang) 300Ω	(B)	AUTO oder MONO 98,0MHz	VR1 (X05-)	Den Pegel wiederstand aufdrehen, und dem VR1 Halt geben wobei den FL201 (TUNED) anzeiger leuchtet wird.	
MW-EMPfangSABTEILUNG BAND: AM(MW)							
(1)	ABSTIMM PEGEL	(D) 1008 kHz 400 Hz, 30% mod 26dBμ(ANT-Eingang)	(B)	1008 kHz	VR2 (X05-)	Den Pegel wiederstand aufdrehen, und dem VR2 Halt geben wobei den FL201 (TUNED) anzeiger leuchtet wird.	

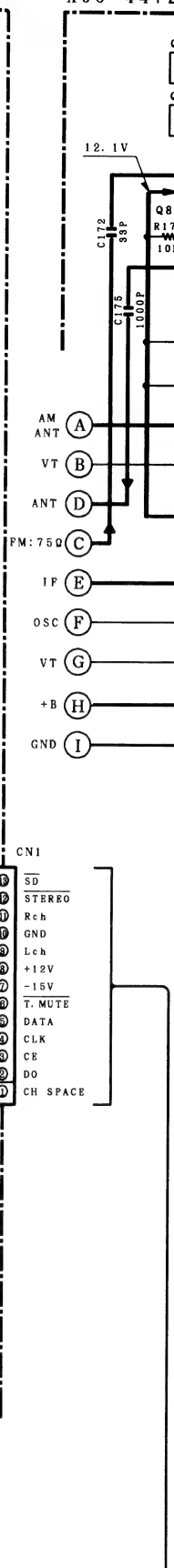


# PC BOARD (Component side view)



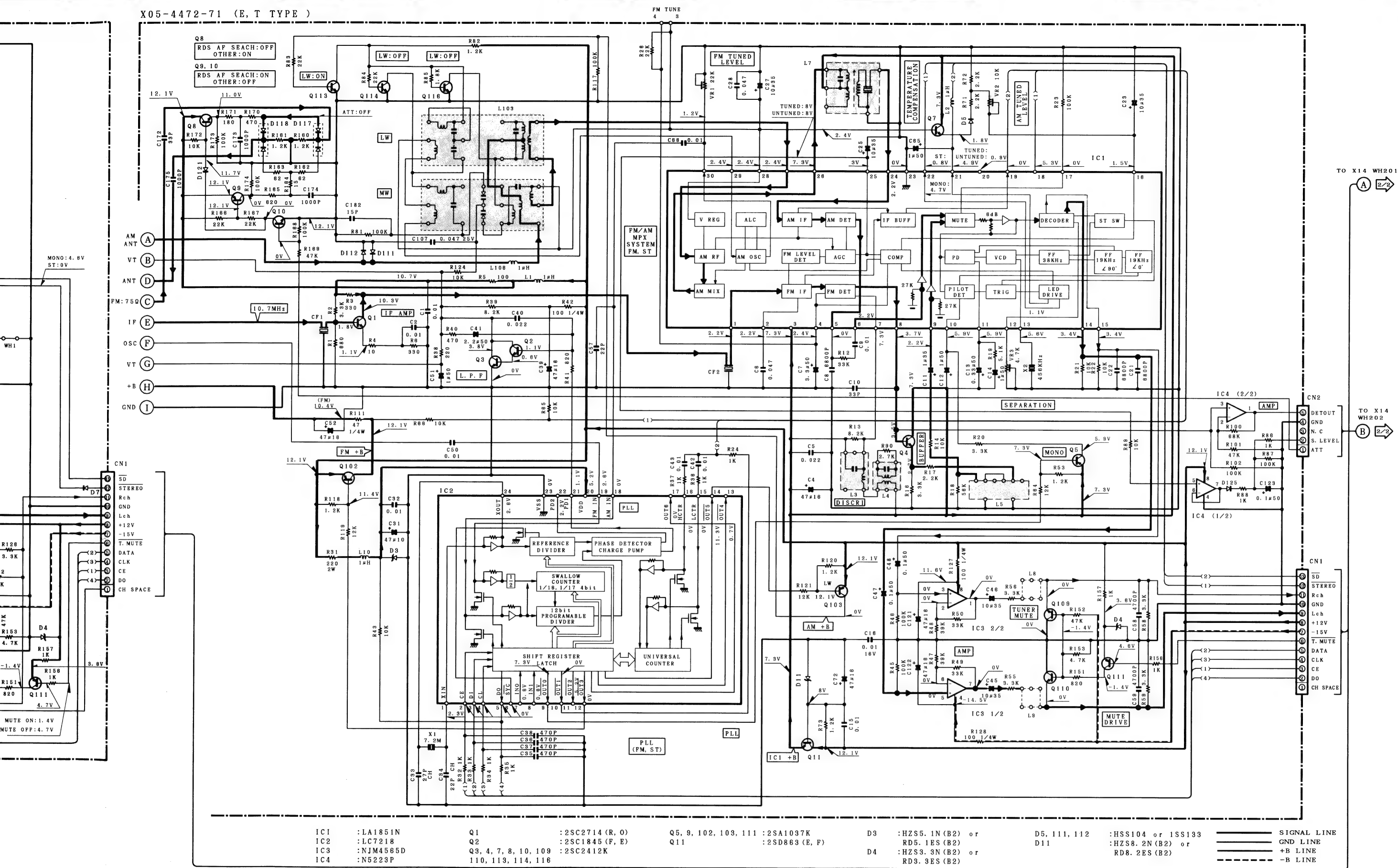
Refer to the schematic diagram for the values of resistors and capacitors.





DC voltages are also measured during reception of signals with a level of 60 dB at the AN. The variations between the values in parentheses are as a function of the level of the signal (with a signal





DC voltages are as measured with a high impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

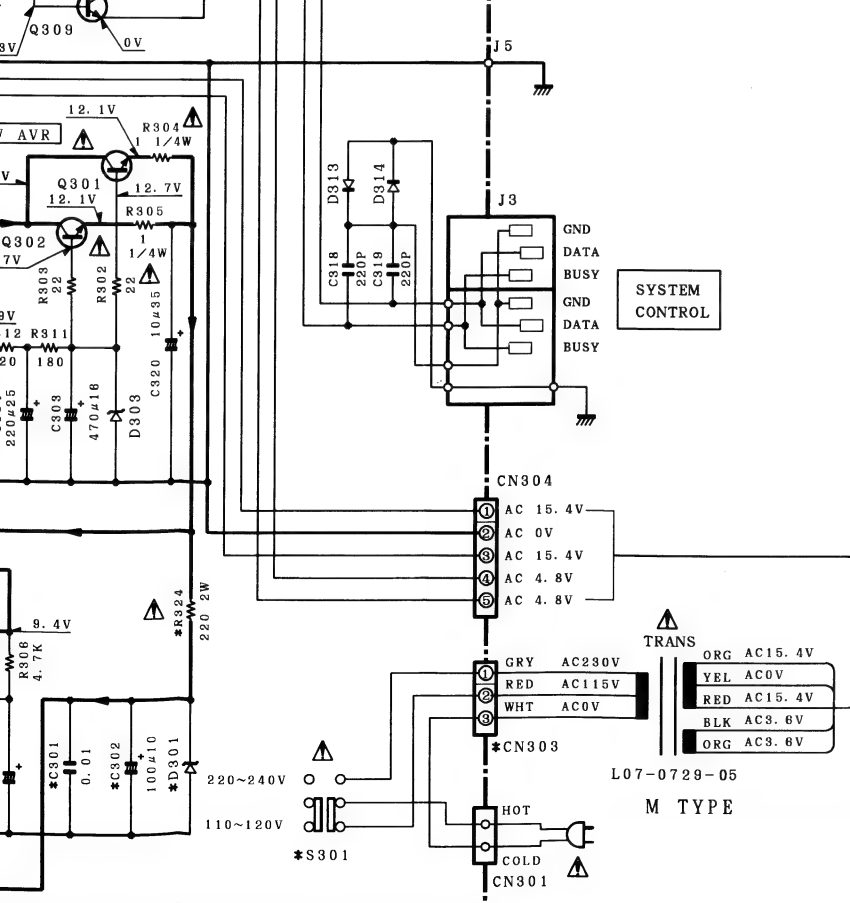
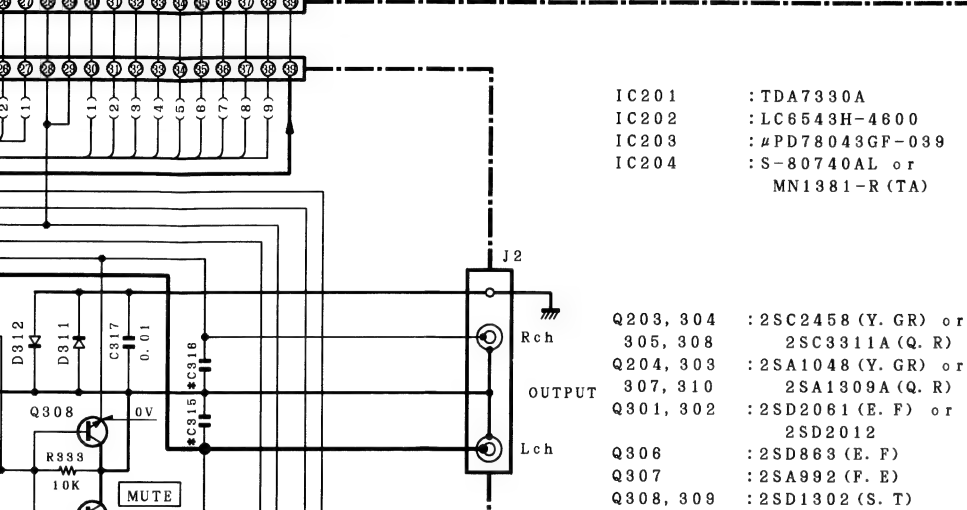
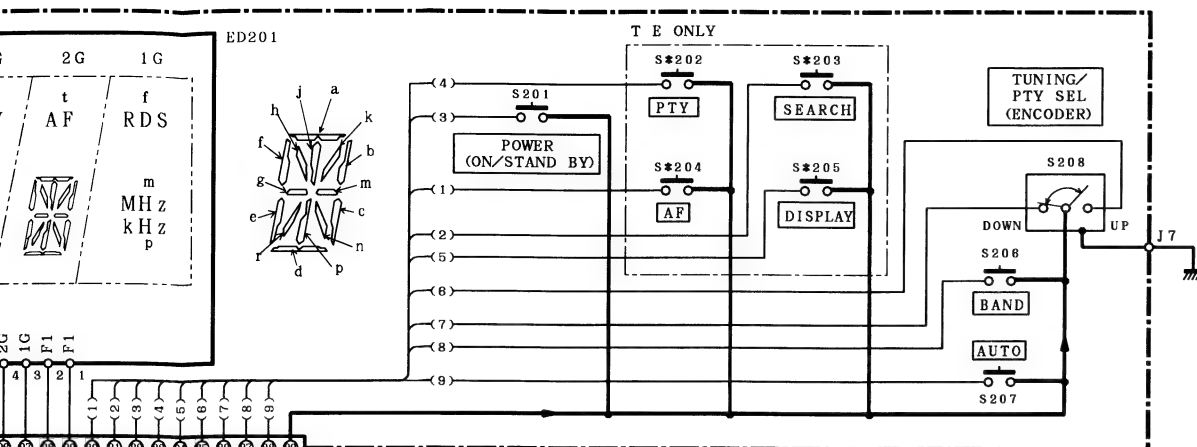
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance pendant la réception d'un signal de programme FM (avec une force de signal de 60 dB à la borne ANT). Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les valeurs entre parenthèses doivent être mesurées pendant la réception d'un signal de programme AM (avec une force de signal de 60 dB à la borne ANT).

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser bei Empfang eines UKW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig. Die eingeklammerten Gleichspannungswerte wurden bei Empfang eines MW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen.

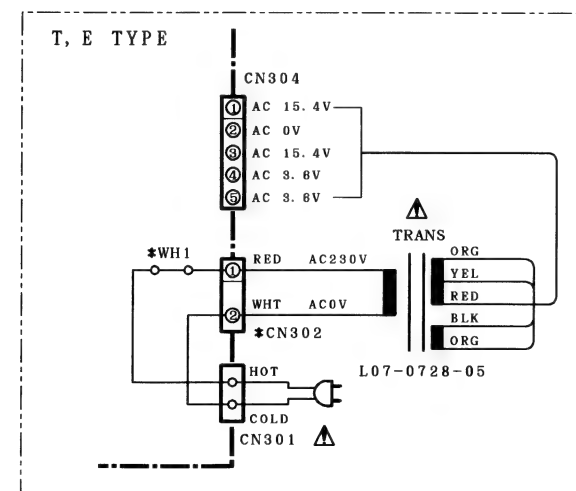
**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  $\Delta$  indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.



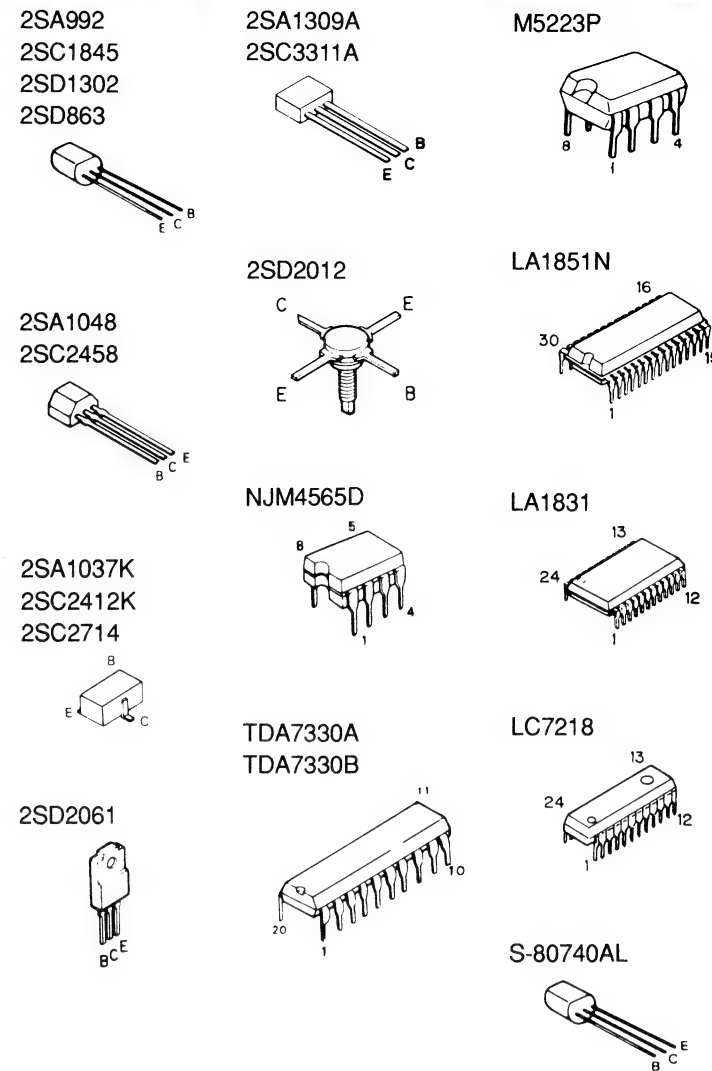
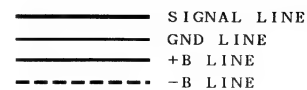




IC201	:TDA7330A	D201~204	:1SS133 or HSS104
IC202	:LC6543H-4600	207~212	
IC203	:μPD78043GF-039	311~316	
IC204	:S-80740AL or MN1381-R (TA)	D205	:RD5.6ES (B2) or HZS5.6N (B2)
		D301	:RD5.1ES (B2) or HZS5.1N (B2)
		D302	:RD2.7ES (B2) or HZS2.7N (B2)
		D303	:RD13ES (B2) or HZS13N (B2)
Q203, 304	:2SC2458 (Y. GR) or 305, 308 2SC3311A (Q. R)	D304, 305	:1SS131 or HSS104A
Q204, 303	:2SA1048 (Y. GR) or 307, 310 2SA1309A (Q. R)	D306	
Q301, 302	:2SD2061 (E. F) or 2SD2012	D307	:RD16ES (B2) or HZS16N (B2)
Q306	:2SD863 (E. F)	D308	:RD3.3ES (B2) or HZS3.3N (B2)
Q307	:2SA992 (F. E)	D309, 310	:S5688B or 1SR139-100
Q308, 309	:2SD1302 (S. T)		



COUNTRY	ABB.	REF. NO.	UNIT NO.	C315	C316	R229	R230	R231	R232	R233	R234	R235	RDS		W1	Q204, W17	R208, 216	S301, WH203	C217	C329
													IC201, 202	D301						
ENGLAND	T	2-71	220P	NO	1K								YES		YES	NO	NO			
EUROPE	E	2-71	220P	NO	10K								YES		YES	NO	NO			
GENERAL MARKET	M	0-21	NO	10K	NO								NO		NO	YES	NO			0.01



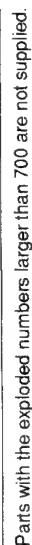
**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter during reception of the FM broadcast signal (with a signal strength of 60 dB at the ANT terminal). Values may vary slightly due to variations between individual instruments or/and units. Values in parentheses are as measured during reception of the AM broadcast signal (with a signal strength of 60 dB at the ANT terminal).

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance pendant la réception d'un signal de programme FM (avec une force de signal de 60 dB à la borne ANT). Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les valeurs entre parenthèses doivent être mesurées pendant la réception d'un signal de programme AM (avec une force de signal de 60 dB à la borne ANT).

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser bei Empfang eines UKW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen instrumenten oder Geräten u. U. geringfügig. Die eingeklammerten Gleichspannungswerte wurden bei Empfang eines MW-Signals (mit einer Feldstärke von 60 dB am Antennenanschluß) gemessen.

## EXPLODED VIEW



# T-1001/L

## PARTS LIST

※ New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

### TUNER UNIT

Unit No.	Destination
X05-4420-21	M
X05-4422-71	T, E

### DISPLAY UNIT

Unit No.	Destination
X14-3770-21	M
X14-3772-71	T

No1

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
T-1001 (UNIT)					
601	1A	A01-3046-01	METALLIC CABINET	M	
602	2A	A60-0429-03	PANEL ASSY	TE	
603	2A	A60-0462-03	PANEL ASSY	M	
603	2A	A22-1639-12	SUB PANEL	TE	
603	2A	A22-1653-12	SUB PANEL	TE	
604	2A	B10-1980-04	FRONT GLASS	TE	
-	-	B46-0310-03	WARRANTY CARD	TE	
-	-	B60-1316-00	INSTRUCTION MANUAL (ENGLISH)	E	
-	-	B60-1317-00	INSTRUCTION MANUAL (F.G.D.I)	E	
-	-	B60-1318-00	INSTRUCTION MANUAL (SPANISH)	ME	
-	-	B60-1319-00	INSTRUCTION MANUAL (CHINESE)	M	
610	1B	E03-0115-05	AC PLUG ADAPTER	M	
612	1C	E30-2592-15	AC POWER CORD	M	
612	1C	E30-2602-05	AC POWER CORD	ME	
615	1A	E30-2600-05	CORD WITH PLUG	T	
616	1B	E30-2628-05	CORD WITH CONNECTOR	T	
620	1B, 2B	E35-0133-05	FLAT CABLE X14(CN201)-(CN202)		
-	-	H50-0696-04	ITEM CARTON CASE	M	
-	-	H50-0845-04	ITEM CARTON CASE	T	
-	-	H50-0846-04	ITEM CARTON CASE	TE	
-	-	H10-5532-02	POLYSTYRENE FOAMED FIXTURE		
-	-	H10-5533-02	POLYSTYRENE FOAMED FIXTURE		
-	-	H12-2172-04	PACKING FIXTURE	T	
-	-	H25-0232-04	PROTECTION BAG (235X350X0.03)	ME	
-	-	H25-0397-04	PROTECTION BAG	ME	
-	-	H25-0632-24	PROTECTION BAG	ME	
-	-	H25-0644-04	PROTECTION BAG (0632 PRINTED)	T	
-	-	H25-0651-04	PROTECTION BAG (0232 PRINTED)	T	
-	-	H25-0659-04	PROTECTION BAG (0397 PRINTED)	T	
625	2B, 2C	J02-0127-05	FOOT		
628	1B	J19-2815-04	ANTENNA HOLDER		
629	2B, 2C	J19-3609-04	UNIT HOLDER		
630	1C	J42-0083-05	POWER CORD BUSHING		
635	2A	K29-5756-04	KNOB		
640	1B	L07-0728-05	POWER TRANSFORMER	TE	
640	1B	L07-0729-05	POWER TRANSFORMER	M	
A	1B, 1C	N09-1445-05	SET SCREW (M3X8)		
B	1A	N09-3023-05	MACHINE SCREW (3 X 8)		
C	1B	N89-3006-46	BINDING HEAD TAPITE SCREW		
D	1A, 1C	N89-3008-45	BINDING HEAD TAPITE SCREW		
E	2B, 2C	N89-3010-45	BINDING HEAD TAPITE SCREW		
F	1B	N89-3018-46	BINDING HEAD TAPITE SCREW		
645	1B	T90-0173-05	LOOP ANTENNA		
645	1B	T90-0174-05	LOOP ANTENNA		
646	1B	T90-0176-05	T TYPE ANTENNA		
647	1B	T90-0185-05	ANTENNA ADAPTOR	TE	
TUNER UNIT (X05-442X-XX)					
C1, 2		CK73FB1H103K	CHIP C	0.010UF	K
C4		CE04KW1A470M	ELECTRØ	47UF	10WV
L:Scandinavia K:USA P:Canada					
Y:PX(Far East, Hawaii) T:England E:Europe					
Y:AAFE(Europe) X:Australia M:Other Areas					

△ indicates safety critical components.

PARTS LIST

※ New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

No.3

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
W48			R92-0670-05	CHIP R 0 0HM	M	
S101			S62-0034-05	SLIDE SWITCH DE EMPHASIS	M	
D3			HZS5.1N(B2)	ZENER DIODE	M	
D3			R05.1ES(B2)	ZENER DIODE	M	
D4			HZS3.3N(B2)	ZENER DIODE	M	
D4			R03.3ES(B2)	ZENER DIODE	M	
D7			MA110	DIODE	M	
D8 , 9			HSS104	DIODE	M	
D8 , 9			ISS133	DIODE	M	
D11			HZS8.2N(B2)	ZENER DIODE	M	
D11			R08.2ES(B2)	ZENER DIODE	M	
D111,112			MA110	DIODE	M	
IC1			LA1831	IC(AM/FM TUNER)	M	
IC2			LC7218	IC(PLL SYNTHESIZER)	M	
IC12			NJM4565D	IC(OP AMP X2)	M	
Q1			2SC2714(R,0)	TRANSISTOR	M	
Q2			2SC1845(F,E)	TRANSISTOR	M	
Q3			2SC2458(Y,GR)	TRANSISTOR	M	
Q3			2SC3311A(Q,R)	TRANSISTOR	M	
Q7			2SC2412K	TRANSISTOR	M	
Q11			2SD663(E,F)	TRANSISTOR	M	
Q102			2SA1037K	TRANSISTOR	M	
Q104			2SA1037K	TRANSISTOR	M	
Q107-110			2SC2412K	TRANSISTOR	M	
Q111			2SA1037K	TRANSISTOR	M	
DT1			W02-1167-05	FM FRONT-END ASSY	M	

TUNER UNIT (X05-444X-XX)

C1 , 2			CK73FB1H103K	CHIP C	TE	
C4			CE04KW1C470M	ELECTR0	TE	
C6			CK73FB1H223K	CHIP C	TE	
C6			CK73FB1E473K	CHIP C	TE	
C7			CE04KW1H3R3M	ELECTR0	TE	
C8			CK73FB1H682K	CHIP C	TE	
C9			CK73FB1H103K	CHIP C	TE	
C10			CK73FSL1H330J	CHIP C	TE	
C11			CE04KW1V100M	ELECTR0	TE	
C12			CE04KW1H010M	ELECTR0	TE	
C13			CE04KW1H633M	ELECTR0	TE	
C14			CE04KW1H010M	ELECTR0	TE	
C15			CK73FB1H103K	CHIP C	TE	
C16			C91-0769-05	CE6AMIC	TE	
C17			CK73FB1H223K	CHIP C	TE	
C21 , 22			CK73FB1H682K	CHIP C	TE	
C23			CE04KW1V100M	ELECTR0	TE	
C25			CE04KW1V100M	ELECTR0	TE	
C27			CE04KW1V100M	ELECTR0	TE	
C28			CK73FB1E473K	CHIP C	TE	
C31			CE04KW1A470M	ELECTR0	TE	
C32			CK73FB1H103K	CHIP C	TE	
C33			CK73FCH1H270J	CHIP C	TE	
C35 -38			CK73FCH1H220J	CHIP C	TE	
C35 -38			CK73FB1H471K	CHIP C	TE	

※ New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

No.2

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
C5			CK73FB1H103K	CHIP C	M	
C8			CK73FB1H103K	CHIP C	M	
C10			CK73FB1H122K	CHIP C	M	
C11			CE04KW1H47M	ELECTR0	M	
C13			CE04KW1H010M	ELECTR0	M	
C14			CE04KW1H2R2M	ELECTR0	M	
C21 , 22			CF92FV1H163J	MF	M	
C23			CE04KW1H010M	ELECTR0	M	
C24			CE04KW1H3R3M	ELECTR0	M	
C25			CE04KW1V100M	ELECTR0	M	
C27			CK73FB1E473K	CHIP C	M	
C28			CE04KW1V100M	ELECTR0	M	
C31			CE04KW1A470M	ELECTR0	M	
C32			CK73FB1H103K	CHIP C	M	
C33			CK73FCH1H270J	CHIP C	M	
C34			CK73FCH1H220J	CHIP C	M	
C35 -38			CK73FB1H471K	CHIP C	M	
C39			CE04KW1C470M	ELECTR0	M	
C40			CK73FB1H223K	CHIP C	M	
C41			CE04KW1H010M	ELECTR0	M	
C42 , 43			CK73FB1H103K	CHIP C	M	
C50			C91-0769-05	CERAMIC	M	
C51			CE04KW1H010M	ELECTR0	M	
C52			CE04KW1C470M	ELECTR0	M	
C57			CK73FSL1H220J	CHIP C	M	
C65			CE04KW1H010M	ELECTR0	M	
C66			CK73FB1H103K	CHIP C	M	
C71			CE04KW1V100M	ELECTR0	M	
C72			CE04KW1C470M	ELECTR0	M	
C107			CK73FB1E473K	CHIP C	M	
C112			CK73FSL1H101J	CHIP C	M	
C114			CK73FB1H681K	CHIP C	M	
C115, 116			CK73FSL1H101J	CHIP C	M	
C121, 122			CE04KW1C470M	ELECTR0	M	
C135, 136			CF92FV1H682J	MF	M	
C182			CK73FSL1H150J	CHIP C	M	
J1			E20-0476-05	LOCK TERMINAL BOARD ANTENNA	M	
CF1 , 2			L72-0531-05	CERAMIC FILTER	M	
CF3			L72-0574-05	CERAMIC FILTER	M	
L7			L30-0467-05	AM IFT	M	
L10			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	M	
L11			L40-1021-14	SMALL FIXED INDUCTOR(1.0MH,K)	M	
L12			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	M	
L103			L39-1309-05	COMBINATION COIL	M	
L106			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	M	
X1			L77-1122-05	CRYSTAL RESONATOR(7.2MHZ)	M	
X2			L78-0295-05	RESONATOR (19KHZ)	M	
R11			RS14KB3A820J	FL-PR00F RS 82 J 1W	M	
R31			RS14KB30221J	FL-PR00F RS 220 J 2W	M	
R42			RD14NB25101J	RD 100 J 1/4W	M	
R111			RD14NB25470J	RD 47 J 1/4W	M	
R127, 128			RD14NB25101J	RD 100 J 1/4W	M	
W46			R92-0670-05	CHIP R 0 0HM	M	

L:Scandinavia K:USA P:Canada  
Y:PX(Far East, Hawaii) T:England E:Europe  
Y:AAFE(S)(Europe) X:Australia M:Other Areas

△ indicates safety critical components.

PARTS LIST

\* New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
Teil ohne Parts No. werden nicht geliefert.

No5					
Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
D125		MA110	DIODE	TE	
IC1		LA1851N	IC(CAM, FM TUNER)	TE	
IC2		LC7218	IC(PLL SYNTHESIZER)	TE	
IC3		NJ4565D	IC(OP AMP X2)	TE	
IC4		M5223P	IC(OP AMP X2)	TE	
Q1		2SC2714(R,0)	TRANSISTOR	TE	
Q2		2SC1845(F,E)	TRANSISTOR	TE	
Q3	.4	2SC2412K	TRANSISTOR	TE	
Q5		2SA1037K	TRANSISTOR	TE	
Q7	.8	2SC2412K	TRANSISTOR	TE	
Q9		2SA1037K	TRANSISTOR	TE	
Q10		2SC2412K	TRANSISTOR	TE	
Q11		2SD863(E,F)	TRANSISTOR	TE	
Q102, 103		2SA1037K	TRANSISTOR	TE	
Q109, 110		2SC2412K	TRANSISTOR	TE	
Q111		2SA1037K	TRANSISTOR	TE	
Q113, 114		2SC2412K	TRANSISTOR	TE	
Q116		2SC2412K	TRANSISTOR	TE	
DT1		FM FRONT-END ASSY		TE	
DISPLAY UNIT (X14-377X-XX)					
C1		CC45FSL1H271J	CERAMIC	TE	
C2		CE04KW1V100M	ELECTR0	J	
C3	.4	CK45FF1H103Z	CERAMIC	TE	
C5		CE04KW1V100M	ELECTR0	TE	
C6	.7	CC45FCH1H270J	CERAMIC	TE	
C8		CE04KW1V100M	ELECTR0	TE	
C9	-11	CK45FF1H103Z	CERAMIC	TE	
C201		C90-1826-05	BACKUP	5.5WV	
C202		CE04KW0J471M	ELECTR0	470UF 6.3WV	
C203		CK45FF1H223Z	CERAMIC	0.022UF Z	
C204, 205		CE04KW1H010M	ELECTR0	1.0UF 50WV	
C206		C91-0769-05	CERAMIC	0.01UF K	
C207		CE04KW1H010M	ELECTR0	1.0UF 50WV	
C208		CK45FF1H103Z	CERAMIC	0.01UF Z	
C209		C90-1332-05	NP-ELEC	10UF 25WV	
C210		CK45FF1H103Z	CERAMIC	0.01UF Z	
C211-213		CC45FSL1H221J	CERAMIC	220PF J	
C215		CK45FF1H103Z	CERAMIC	0.01UF Z	
C217		CK45FF1H103Z	CERAMIC	0.01UF Z	
C301		CK45FF1H103Z	CERAMIC	0.01UF Z	
C302		CE04KW1A101M	ELECTR0	10WV	
C303		CE04DW1C411M	ELECTR0	470UF 16WV	
C304		CE04KW1E221M	ELECTR0	220UF 25WV	
C305		CE04KW1H010M	ELECTR0	1.0UF 50WV	
C306		CE04KW0J471M	ELECTR0	470UF 6.3WV	
C307, 308		CK45FF1H103Z	CERAMIC	0.01UF Z	
C310	*	CE04DW1H331M	ELECTR0	330UF 50WV	
C311		CE04KW1E101M	ELECTR0	100UF 25WV	
C312, 313	*	CE04KW1V470M	ELECTR0	47UF 35WV	
		C90-3519-05	ELECTR0	1000UF 25WV	
C314		CE04KW1E101M	ELECTR0	100UF 25WV	
C315, 316		CC45FSL1H221J	CERAMIC	220PF J	
C317		CK45FF1H103Z	CERAMIC	0.01UF Z	
C318, 319		CC45FSL1H221J	CERAMIC	220PF J	

L:Scandinavia K:USA P:Canada  
Y:PX(Far East, Hawaii) T:England E:Europe  
Y:AAFE(S/Europe) X:Australia M:Other Areas  
A indicates safety critical components.

\* New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
Teil ohne Parts No. werden nicht geliefert.

No4					
Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
C39		CE04KW1C470M	ELECTR0	TE	
C40		C92-2EM14223J	W/LAR	16WV	
C41		CE04H1H2R4M	NP-ELEC	0.022UF J	
C42	.43	CK73FB1H103K	CHIP C	50WV	
C45	.46	CE04KW1V100M	ELECTR0	0.010UF K	
C50		C91-0769-05	CERAMIC	0.01UF K	
C51		CE04KW1H010M	ELECTR0	1.0UF 50WV	
C52		CE04KW1C470M	ELECTR0	47UF 16WV	
C57		CC73FCH1H220J	CHIP C	22PF J	
C58	.59	CK73FB1H472K	CHIP C	4700PF K	
C65		CE04KW1H010M	ELECTR0	1.0UF 50WV	
C66		C91-0769-05	CERAMIC	0.01UF K	
C72		CE04KW1C470M	ELECTR0	47UF 16WV	
C107		CK73FB1E473K	CHIP C	0.047UF K	
C121, 122		CE04KW1C470M	ELECTR0	47UF 16WV	
C123		CE04KW1H010M	ELECTR0	0.1UF 50WV	
C172		CK73FSL1H330J	CHIP C	33PF J	
C173-175		CK73FB1H102K	CHIP C	1000PF K	
C182		CC73FSL1H150J	CHIP C	15PF J	
J1		E20-0321-05	LOCK TERMINAL BOARD ANTENNA	TE	
CF1	.2	L79-0536-05	CERAMIC FILTER	TE	
L1	.2	L40-1091-17	SMALL FIXED INDUCTOR(1UH)	TE	
L3		L30-0496-05	FM IFT	TE	
L4		L30-0497-05	FM IFT	TE	
L5		L79-0125-05	LC FILTER	TE	
L7		L30-0467-05	AM IFT	TE	
L8	.9	L79-0790-05	LC FILTER	TE	
L10		L40-1091-17	SMALL FIXED INDUCTOR(1UH)	TE	
L103		L39-1310-05	COMBINATION COIL	TE	
L106		L40-1091-17	SMALL FIXED INDUCTOR(1UH)	TE	
X1		L77-1122-05	CRYSTAL RESONATOR(7.2MHZ)	TE	
X2		L78-0295-05	RESONATOR (19KHZ)	TE	
R31		R514KB30221J	FL-PROOF RS	220 J 2W	
R42		R014NB2E101J	RD	100 J 1/4W	
R111		R014NB2E470J	RD	47 J 1/4W	
R127, 128		R014NB2E101J	RD	100 J 1/4W	
VR1		R12-3686-05	TRIMMING POT.(22K) FM LEVEL	TE	
VR2		R12-3685-05	TRIMMING POT.(10K) AM LEVEL	TE	
VR3		R12-1619-05	TRIMMING POT.(4.7K) SEPARATION	TE	
W100-103		R92-0670-05	CHIP R	0 OHM	
W200-211		R92-0679-05	CHIP R	0 OHM	
D3		HZ55.1N(B2)	ZENER DIODE	TE	
D4		R05.1ES(B2)	ZENER DIODE	TE	
D5		HZ53.3N(B2)	ZENER DIODE	TE	
D6		RD3.3ES(B2)	ZENER DIODE	TE	
D5		HSS104	DIODE	TE	
D5		1SS133	DIODE	TE	
D11		HZ58.2N(B2)	ZENER DIODE	TE	
D11		R08.2ES(B2)	ZENER DIODE	TE	
D111, 112		HSS104	DIODE	TE	
D111, 112		1SS133	DIODE	TE	
D117, 118		1SS268	DIODE	TE	
D121		MA110	DIODE	TE	

L:Scandinavia K:USA P:Canada  
Y:PX(Far East, Hawaii) T:England E:Europe  
Y:AAFE(S/Europe) X:Australia M:Other Areas  
A indicates safety critical components.



PARTS LIST

\* New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
D308			RJ3.3ES(B2)	ZENER DIODE		
D309, 310			SS6888	DIODE		
D309, 310			1SR139-100	DIODE		
D311-317			HSS104	DIODE		
D311-317			1SS133	DIODE		
ED201		*	CM1224C	INDICATOR TUBE	TE	
IC201		*	TDA7330A	IC(RDS DEMODULATOR)	TE	
IC201		*	TDA7330B	IC(RDS DEMODULATOR)	TE	
IC202			LC6543H-4600	IC	TE	
IC203		*	UPD78043CF-039	IC		
IC204			MN1381-R(TA)	IC(VOLTAGE DETECT)		
IC204			S-80740AL	IC(VOLTAGE DETECTOR)		
Q203			2SC2458(Y,GR)	TRANSISTOR		
Q203			2SC311A(Q,R)	TRANSISTOR	M	
Q204			2SA1048(Y,GR)	TRANSISTOR		
Q204			2SA1309A(Q,R)	TRANSISTOR	M	
Q301, 302			2SD2012	TRANSISTOR		
Q301, 302			2SD266(E,F)	TRANSISTOR		
Q303			2SA1248(Y,GR)	TRANSISTOR		
Q303			2SA1309A(Q,R)	TRANSISTOR		
Q304, 305			2SC2458(Y,GR)	TRANSISTOR		
Q304, 305			2SC311A(Q,R)	TRANSISTOR		
Q306			2SD863(E,F)	TRANSISTOR		
Q307			2SA992(E,F)	TRANSISTOR		
Q308, 309			2SD1302(S,T)	TRANSISTOR		
Q310			2SA1048(Y,GR)	TRANSISTOR		
Q310			2SA1309A(Q,R)	TRANSISTOR		

\* New Parts  
Parts without Parts No. are not supplied.  
Les articles non mentionnés dans le Parts No. ne sont pas fournis.  
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
C320			CE04KM1V100M	ELECTRØ 100UF 35WV		
C321			CE04KM1E101M	ELECTRØ 100UF 25WV		
C322			CE04KM1V4R7M	ELECTRØ 4.7UF 35WV		
C323			CE04KM1V100M	ELECTRØ 100UF 35WV	TE	
C324-326			CK45FF1H103Z	CERAMIC 0.010UF Z		
C324, 325			CK45FF1H103Z	CERAMIC 0.010UF Z	M	
C327			CE04KM1V4R7M	ELECTRØ 4.7UF 35WV		
C328			CE04KM1H010M	ELECTRØ 1.0UF 50WV	M	
C329			CK45FF1H103Z	CERAMIC 0.010UF Z		
CN201	18		E40-4179-05	FLAT CABLE CONNECTOR		
CN202	2B		E40-4219-05	FLAT CABLE CONNECTOR		
J2		*	E63-0103-05	PHONE JACK OUTPUT		
J3			E68-0311-05	RECTANGULAR RECEPTACLE SYNCHRO		
L1, 2			L40-1001-17	SMALL FIXED INDUCTOR(10UH, K)	TE	
L201			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	M	
L201-204			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	TE	
L203, 204			L40-1091-17	SMALL FIXED INDUCTOR(1UH)	M	
X1			L77-2002-05	CRYSTAL RESONATOR(4.332MHZ)	TE	
X2			L78-0503-05	RESONATOR (4.00MHZ)	TE	
X201			L78-0267-05	RESONATOR (4.194MHZ)		
CP201			R90-0487-05	MULTI-COMP 47KX4 J 1/6W		
CP203			R90-0493-05	MULTI-COMP 100KX9 J 1/6W		
CP204		*	R90-0911-05	MULTI-COMP 1000PFX 9 M		
R304, 305			RD14GB2E1R0J	FL-PRØØF RD 1.0 J 1/4W		
R313			RD14GB2E102J	FL-PRØØF RD 1.0K J 1/4W		
R318			RS14DB3D121J	FL-PRØØF RS 120 J 2W		
R319			RS14DB3A820J	FL-PRØØF RS 82 J 1W		
R323			RS14DB3D471J	FL-PRØØF RS 470 J 2W	TE	
R324			RS14DB3D221J	FL-PRØØF RS 220 J 2W		
R326			RS14DB3A222J	FL-PRØØF RS 2.2K J 1W		
R327			RS14DB3D102J	FL-PRØØF RS 1.0K J 2W		
S201-207			S40-1064-05	PUSH SWITCH POWER, ETC	M	
S206, 207			S40-1064-05	PUSH SWITCH BAND AUTO	TE	
S208			S40-1064-05	PUSH SWITCH BAND AUTO	M	
S209			S29-1156-05	ROTARY SWITCH TUNING		
S301			S62-0001-05	SLIDE SWITCH VOLTAGE SELECTOR	M	
D201-204			HSS104	DIODE		
D201-204			1SS133	DIODE		
D205			HZ55.6N(B2)	ZENER DIODE		
D205			R05.6ES(B2)	ZENER DIODE		
D207-212			HSS104	DIODE		
D207-212			1SS133	DIODE		
D301			HZ55.1S(B2)	ZENER DIODE	TE	
D301			R05.1JS(B2)	ZENER DIODE	TE	
D302			HZ52.7N(B2)	ZENER DIODE		
D302			R02.7ES(B2)	ZENER DIODE		
D303			HZ513N(B2)	ZENER DIODE		
D303			R013ES(B2)	ZENER DIODE		
D304-306			HSS104A	DIODE		
D304-306			1SS131	DIODE		
D307			HZ516N(B2)	ZENER DIODE		
D307			RD16ES(B2)	ZENER DIODE		
D308			HZ53.3N(B2)	ZENER DIODE		

△ indicates safety critical components.

L:Scandinavia  
Y:PX(Far East, Hawaii)  
Y:AAFE(S)(Europe)

K:USA  
T:England  
X:Australia

P:Canada  
E:Europe  
M:Other Areas

△ indicates safety critical components.

L:Scandinavia  
Y:PX(Far East, Hawaii)  
Y:AAFE(S)(Europe)

K:USA  
T:England  
X:Australia

P:Canada  
E:Europe  
M:Other Areas

